

PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 144FA (EAST PATRICK STREET) AND EAST STREET IN FREDERICK COUNTY. THE MODIFICATION WILL UPGRADE THE EXISTING PEDESTRIAN SIGNALS TO COUNTDOWN PEDESTRIAN SIGNALS AND INSTALL NEW ADA RAMP AND AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTONS. MD 144FA IS ASSUMED TO RUN IN THE EAST-WEST DIRECTION.

II. INTERSECTION OPERATION

THE INTERSECTION OPERATES IN A NEMA 5-PHASE, FULL-TRAFFIC ACTUATED MODE, WITH THE EAST STREET APPROACHES RUNNING CONCURRENTLY, AND THE EAST PATRICK STREET APPROACH OPERATING AS A SEPARATE PHASE. A LAG EXCLUSIVE/PERMISSIVE LEFT TURN PHASING WILL BE PROVIDED FOR NORTHBOUND AND SOUTHBOUND EAST STREET. AN ALTERNATE PEDESTRIAN PHASE WITH AUDIBLE PEDESTRIAN SIGNALS SHALL BE INSTALLED ACROSS EAST ST. AND A LEAD ACTUATED AUDIBLE PEDESTRIAN PHASE SHALL BE INSTALLED ACROSS MD 144FA.

III. APS NOTE

TO CROSS MD 144FA

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON WILL ANNOUNCE "WAIT TO CROSS EAST PATRICK AT EAST."
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

TO CROSS EAST STREET

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON WILL ANNOUNCE "WAIT TO CROSS EAST AT EAST PATRICK."
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

ITEM NO./ CAT CODE	QUANTITY	DESCRIPTION
NONE		

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
1001	425	LF REMOVE EXISTING PAVEMENT LINE MARKINGS, ANY WIDTH
2002	3	CY TEST PIT EXCAVATION
5005	415	LF 12 INCH LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINS
8001	8	EA AUDIBLE/TACTILE PEDESTRIAN PUSH BUTTON
8003	1	EA F & I 2 WIRE CONTROL UNIT
8004	8	EA 16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL
8005	8	EA PEDESTRIAN EDUCATION SIGN
8007	1	EA REMOVE AND DISPOSE PER ASSIGNMENT
8012	620	LF NO.6 AWG STRANDED BARE COPPER GROUND WIRE
8013	80	LF 3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8019	5	EA CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
8020	875	LF ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8021	990	LF ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
NEG	6	EA F & I PAINTED BREAKAWAY PEDESTAL POLE (ANY SIZE)

C. IF THE CABINET IS TO BE REMOVED SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

CONTACTS

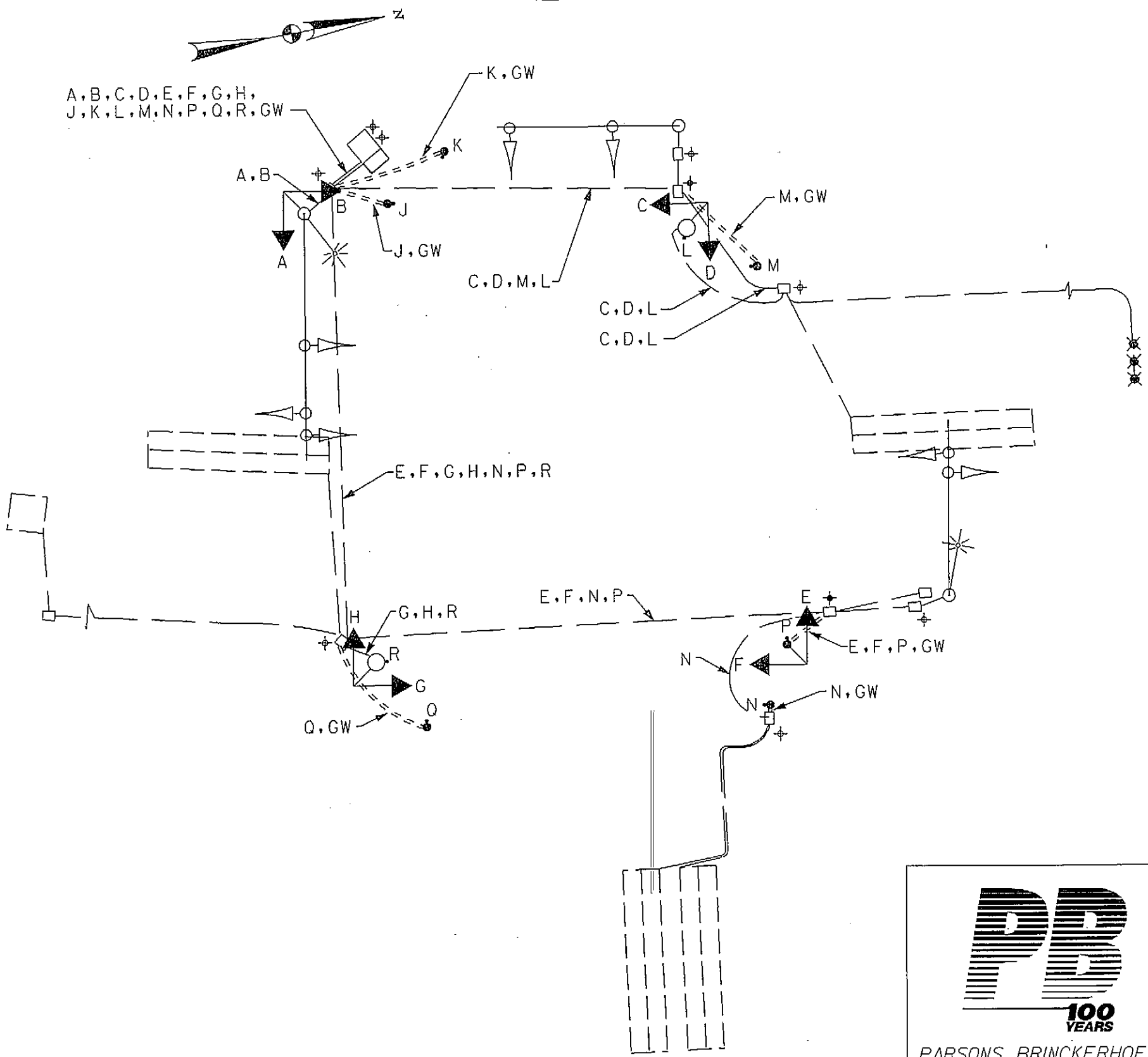
THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. DAVE COYNE DISTRICT ENGINEER PHONE: (301) 624-8101	MR. RICHARD DAFF SR. CHIEF, TRAFFIC OPERATIONS 410-787-7630
MR. JOHN CONCANNON ASSISTANT DISTRICT ENGINEER - TRAFFIC PHONE: (301) 624-8140	MR. ROBERT SNYDER ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS 410-787-7631
MR. RAYMOND F. JOHNSON ASSISTANT DISTRICT ENGINEER - MAINTENANCE PHONE: (301) 624-8105	MR. ED RODENHIZER TEAM LEADER SIGNAL OPERATIONS 410-787-7650
MS. ANDREA ABEND DISTRICT UTILITIES ENGINEER PHONE: (301) 624-8115	MR. EUGENE BAILEY TEAM LEADER SIGN OPERATIONS 410-787-7670
MR. JOHN HUCHROWSKI ASSISTANT DISTRICT ENGINEER-CONSTRUCTION PHONE: (301) 624-8200	MS. DARLENE EIDE SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE) 410-787-7668
MR. ED RODENHIZER TEAM LEADER SIGNAL OPERATIONS PHONE: (410) 787-7652	

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PHASE 2 + 6 PED	R	R	R	R	R	R	R	R	WK	WK	WK	WK	DW	DW	DW	DW
PHASE 2 + 6	G	G	G	G	G	G	R	R	WK	WK	WK	WK	DW	DW	DW	DW
PED CLEARANCE	G	G	G	G	G	G	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW	DW	DW
2 + 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 1 + 5	←G-/R	←G-/R	R	←G-/R	←G-/R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
1 + 5 CHANGE	←Y-/R	←Y-/R	R	←Y-/R	←Y-/R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4	R	R	R	R	R	R	G	G	DW	DW	DW	DW	DW	DW	DW	DW
4 CHANGE	R	R	R	R	R	R	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 ALT	R	R	R	R	R	R	G	G	DW	DW	DW	DW	WK	WK	WK	WK
PED CLEARANCE	R	R	R	R	R	R	G	G	DW	DW	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW
4 ALT CHANGE	R	R	R	R	R	R	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK

WIRING DIAGRAM



WIRING KEY

- A,B,C,D,E,F,G,H - 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- J,K,L,M,N,P,Q,R - 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- GW - GROUND WIRE
- + - PROPOSED GROUND ROD
- - EXISTING GROUND ROD

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 144FA (EAST PATRICK STREET) AND EAST STREET
SIGNAL MODIFICATION
FREDERICK, MARYLAND

GENERAL INFORMATION PLAN

SCALE 1"=20'	DATE MAR 16, 2010	CONTRACT NO. AX7085168
DESIGNED BY K. PERMISOHN	COUNTY FREDERICK	
DRAWN BY M. WAGNER	LOGMILE 10A14404.71	
CHECKED BY K. PERMISOHN CSW	TIMS NO. K210	
FAP NO.	TOD NO.	
TS NO. 3841A GI	DRAWING SG-02 OF 02	SHEET NO. 02 OF 02

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